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# Procedures Manual for Small Spill Natural Resource Damage Assessments (NRDA)

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## **INTRODUCTION**

This document is intended to be a guidance document for DFG employees for natural resource damage assessments (NRDA) of small spills and other pollution events in California. *It is not intended to supercede the Department of Fish and Game Pollution Response Manual (PRM); rather, it is intended to provide additional details regarding NRDA in the context of small pollution events.* Appendix M of the PRM provides an excellent overview of NRDA, particularly data collection during response in the context of a larger spill. That overview is broadly applicable to a small spill setting. This document covers protocol related to, but not exclusively for the purpose of, NRDA during the immediate response to a spill as well as during the post-spill assessment stage. The emphasis of this document is on communication and coordination among DFG staff, other agencies, local district attorneys (DAs) and attorney generals (AGs), and responsible parties (RPs). This document also provides guidance on the use and management of recovered damages. These procedures are intended to promote an efficient and consistent approach to small spill NRDAs, as well as promote consistency between small spill and large spill NRDAs.

For the purposes of this document, a "small spill" is any pollution incident large enough to merit NRDA but typically having all or most of the following characteristics:

- 1) DFG is the only Trustee agency involved in the NRDA;
- 2) the natural resource injuries are limited in scope to a single habitat type, as well as limited in quantity to an area less than 50 acres or 10 stream miles;
- 3) the pollution event is a one-time event and not a chronic problem;
- 4) impacts on human recreational activities is negligible.

In general, a small spill that necessitates NRDA will require a Level II response, as described in PRM, Appendix G.

Natural resource damages are the amount of money and/or restoration needed to compensate the public for interim losses to wildlife and/or habitat between the time of an incident and full recovery. Full recovery occurs when the biota and habitat have returned to their baseline condition at the time of the incident, including a similar age-class mix of individuals. Clean-up, remediation of the impacted area, rehabilitation of injured animals, and primary restoration of the impacted area to speed recovery are not to be considered compensatory restoration. Primary restoration, which are any restoration actions designed to speed the recovery of the impacted resources, may also be incorporated into a damage claim.

Note that, for NRDA purposes, "injury" refers to physical harm to flora, fauna, or habitat, and "damage" refers to the economic quantification (in dollars) of that injury.

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#### I. ORGANIZATION

## A. Time Periods (Stages)

An incident can be divided into the following stages, with the associated time periods and activities. This document will address all of these activities, roughly in the order of this time sequence. Note that the NRDA report described in PRM 7430.C and 8100.C is divided here into two reports: the Injury Report (also known as an Environmental Incident Report (EIR) which is prepared as a Supplemental Report to the Investigation Report—and is commonly called a "Supplemental Report") and the Damage Report. OSPR-RAP refers to the Resource Assessment Program at OSPR.

STAGE	TIME PERIOD	ACTIVITIES
1) Response	The period from the time the incident is reported to the time clean-up is completed (typically about a week after the spill)	<ul> <li>Collection of time-critical data;</li> <li>Begin preparation of Injury Report;</li> <li>Notification and coordination with OSPR-RAP and Legal as warranted.</li> </ul>
2) Post-response assessment	The period from the end of response until the resolution of the case with the RP	<ul> <li>Implementation of any further data collection or information gathering;</li> <li>Completion of Injury Report;</li> <li>Preparation and completion of Damage Report;</li> <li>Coordination with OSPR Legal, other attorneys, and RP as warranted;</li> <li>Preliminary restoration planning;</li> <li>Settlement negotiations and resolution of case</li> </ul>
3) Post- settlement restoration	The period from the resolution of the case to the appropriation of the natural resource damages	<ul> <li>Completion of restoration planning and identification of restoration actions;</li> <li>Management of recovered damages into proper accounts;</li> <li>Implementation of restoration actions</li> </ul>

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#### **B.** Personnel

The organization of personnel for a small spill NRDA is simple. It will consist of a Scientific Lead person and a Legal Lead person for DFG.

#### 1. Lead Scientific Person

The Scientific Lead person will change in the course of an incident. The following chart shows who this person will be in most cases:

STAGE	SCIENTIFIC LEAD PERSON
1) Response	OSPR Environmental Scientist or Regional biologist, or whomever from DFG is actively responding to the spill and collecting data or making observations of natural resource injuries (usually OSPR-FRT or Regional biologists); this lead will be determined by the responders
2) Post-response assessment	OSPR Scientific member of the RAP
3) Post-settlement restoration	OSPR Scientific member of the RAP, Environmental Scientist, Regional biologist, or another person as decided by DFG; not necessarily the same person as in Stage 2, but possibly the same person as in Stage 1

#### 2. Lead Legal Person

The Legal Lead usually does not change in the course of a spill. Often, the Legal Lead is not assigned until well after the spill occurs.

#### 3. Job Duties of the Lead Persons

The Scientific Lead is to coordinate with all the relevant scientific experts and personnel involved in the NRDA. This coordination includes the organization of meetings and conference calls and the facilitation of task assignments, should specific tasks (e.g., research into certain aspects of the injury or baseline conditions) need to be done.

The Legal Lead person will be designated by OSPR-Legal. He/she will coordinate with other attorneys involved in the case, as well as coordinate any communications with the RP.

The Scientific and Legal Lead persons will coordinate with each other, keeping each other informed of important developments and deadlines.

DFG-OSPR Small Spill NRDA Procedures Manual DRAFT; December 11, 2002 Small Spills NRDA Procedures Flow Diagram Response WARDEN FIELD BIOLOGIST Begins investigation; Collects time-critical Communicates with other DFG responders regarding possible NRDA. Notifies and coordinates with OSPR-Stage RAP and Legal during response as warranted. Before Stage 2 begins, all four decide as a group whether or not to pursue NRDA. WARDEN FIELD BIOLOGIST Stage 2: Post-response Prepares Warden's · Coordinates with Report; warden, OSPR RAP Refers case to OSPR and Legal; Legal; • Prepares Informs DA of NRDA. (Supplemental) Injury OSPR CEGAL Appoints a Legal Lead for the RAP SCIENTIFIC LEAD • Takes over as Scientific Lead; Coordinates with warden, other • Coordinates any additional field work; staff, and DA. • Prepares Damage Report in consultation with Field Biologist. RAP SCIENTIFIC OSPR LEGAL LEAD • Ensures that recovered **FIELD** • If recovered NRD go NRD are put into a proper **BIOLOGIST** to Small Spills Trust, account. • May suggests specifies which appropriate habitat-specific subrestoration account the money projects; should go to.

Stage 3: Post-settlement

 May oversee project

project

#### DFG SMALL SPILLS TRUSTEES or REGION

• Selects an appropriate use of the funds and implements restoration project.

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# II. RESPONSE (Stage 1)

#### A. Decision to Collect Data for NRDA

The decision to formally pursue an NRDA claim will be made during the post-response Stage (Stage 2). However, during Stage 1, the responders will make a preliminary determination regarding the potential for NRDA (see PRM 5120.F and 7410.A). If the responders observe that the pollution caused by the incident appears to have killed or is likely to kill birds, fish, or other organisms, or appears to have compromised the usefulness of habitat for wildlife, they may assume that NRDA is a possibility and begin gathering information and collecting time-critical data.

## B. Notification of OSPR-RAP and OSPR-Legal

#### 1. Notification Protocol: When to Notify

The Scientific Lead in Stage 1 should take time *during the response* to notify OSPR-RAP and Legal of the on-going spill if any of the following occur:

- 1) The wildlife impacts are such that they decide to call the Oiled Wildlife Care Network (OWCN);
- 2) Large numbers of dead fish or birds (greater than 20) are discovered (or suspected) during the initial response;
- 3) Human recreational activities are significantly impacted, such as with a beach closure;
- 4) Another Trustee agency (e.g., USFWS, NOAA, etc.) responds to the spill with an interest in NRDA;
- 5) The RP or a consultant for the RP responds to the spill for the purposes of NRDA; or
- 6) The Lead wants the assistance of OSPR-RAP or Legal for any reason.

If none of these criteria apply, NRDA may still be warranted. In that case, the Scientific Lead can simply contact OSPR-RAP and Legal after the response.

## 2. Notification Protocol: Whom to Notify

When notifying OSPR-RAP and Legal, the Scientific Lead in Stage 1 need only call the head of OSPR-RAP (Senior Toxicologist Julie Yamamoto) and the head of Legal (Steve Sawyer). At the same time, the Scientific Lead during the response (Stage 1) should also inform the responding warden. The warden should refer the case to OSPR-Legal if NRDA is being considered.

## C. Notification of Other Trustee Agencies

The Scientific Lead in Stage 1 should also take time to notify the USFWS if there appear to be possible impacts to birds, marine mammals, or endangered species, and to notify NOAA-NMFS if there appears to be an impact to anadromous or marine fish. Additionally, the RAP may be consulted regarding notification of other trustees (e.g., State Parks, tribes, etc.).

## **D.** Collection of Ephemeral Data

The Scientific Lead in Stage 1 will be responsible for the collection of time-critical data, as well as collecting basic information regarding the incident. The **Investigation Checklist** in **Appendix A** serves as a one-page guide in collecting this data. See PRM, 7320.4, 7330, 7410.B,

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and Appendices F and M for instructions regarding sampling, the collection of dead animals, and other forms of data collection. Note that these activities are standard in response and are not exclusively for NRDA.

## III. POST-RESPONSE INJURY AND DAMAGE ASSESSMENT (Stage 2)

## A. Injury Report

The Injury Report (often referred to as a Supplemental Report on Biological Injuries) will be prepared under the coordination of the Scientific Lead from Stage 1. Guidelines for the Injury Report are provided in **Appendix B**. The Injury Report should be completed within six months of the incident, unless results from injury assessment studies are still pending.

## B. Appointment of Leads for Stage 2

Following the completion of Stage 1, the Scientific Lead from Stage 1 will contact OSPR-RAP and OSPR-Legal if they have not already been notified (see **Notification Protocol** in Stage 1 above). This should be done shortly after the completion of clean-up. OSPR-RAP and OSPR-Legal will then appoint Scientific and Legal Leads for Stage 2 within one week. Scientific and Legal will inform each other, the warden, and the Scientific Lead from Stage 1 of the Stage 2 Scientific and Legal Leads.

## C. Decision to Pursue NRDA (Pre-assessment)

The first task of the new Leads will be to decide whether or not to formally pursue NRDA. The final decision to pursue NRDA will be made as a group decision between four people: the Stage 1 and 2 Scientific Leads, the Legal Lead, and the warden. Criteria they will consider are:

- evidence of injury
- size of injury
- ability to quantify the injury
- jurisdiction

This task is termed the "pre-assessment". If it is decided to pursue NRDA, the Legal Lead will ensure that the warden, other responding field staff, and relevant DA's are informed. The warden should then refer the case to OSPR Legal.

## **D.** Injury Assessment Studies

Further injury assessment studies (e.g., macroinvertebrate studies as described in PRM 7420 and Appendix N) should be arranged during Stage 2. The Scientific Lead for Stage 2 should consult with the Lead from Stage 1 and with the Legal Lead in determining to pursue any studies after the completion of clean-up, as described in PRM 7430.B. The Legal Lead will take responsibility for arranging the financing of the study, either through DFG (to be claimed later as

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a reimbursable cost to the RP) or directly with the RP.

## **E. Preliminary Restoration Planning**

Preliminary restoration planning is the identification of possible restoration options that may be pursued once damages are recovered. This planning will be coordinated by the Stage 2 Scientific Lead, who will probably have to consult with the Scientific Lead from Stage 1 or other local experts (within and outside of DFG) with knowledge of the impacted area's resources. See **Appendix C** for criteria for identifying appropriate projects. If no restoration planning is conducted in Stage 2, it may be done in Stage 3, after resolution of the case.

Identifying possible compensatory restoration projects prior to settlement is not necessary for damage assessment. However, it may assist in the settling of a case and it may also assist in the damage assessment, as many economic methods for calculating damages are based on restoration costs.

## F. Damage Report

The Damage Report focuses on the economic analysis of the injuries. It will be prepared with the coordination of a Resource Economist at the RAP, coordinating with the Scientific Leads from Stage 1 and 2 and the Legal Lead. In many instances, the Resource Economist will be the Scientific Lead for Stage 2. See **Appendix D** for guidelines regarding the report, economic methods, and the appropriate heading. Prior to finalizing the report, draft copies should be sent to the Scientific Leads from Stage 1 and 2 for comments. The final report should be sent as an internal memo to the Legal Lead with the appropriate heading.

#### G. Cost Recovery

It is important for each DFG employee involved in the NRDA to record the amount of time they spend on the case and report it on their time sheets, as described in PRM, Appendix G. Note that a separate Index and PCA code may or may not be established for the NRDA component of the case. If a separate code is established, note that all activities by the responding personnel (including the Stage 1 Scientific Lead) up through the preparation of the Supplemental Report may be considered response.

## H. Settlement Negotiations and Communication with DAs and AGs

All contacts with the RP and other attorneys will be coordinated through the Legal Lead. The Legal Lead will consult with the warden and other DFG personnel involved in the preparation of the Injury and Damage Reports regarding the strengths and weaknesses of the evidence and analysis. The Scientific and Legal Leads should work together if a claim is reduced in order to reach an appropriate compromise settlement with an RP.

The Legal Lead should work with the DFG warden and the local DA or relevant attorney to ensure that the resolution of a criminal case should not preclude the recovery of civil penalties or damages.

#### IV. RECOVERED DAMAGES (Stage 3)

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In the spirit of DFG Code 2014 and OPA 90, the recovered damages will be used to compensate the public for the injuries incurred during the pollution incident. Again, see **Appendix C** for appropriate criteria regarding the use of recovered damages. These same criteria are used to guide DFG representatives on trustee councils in large cases.

## A. Managing of Funds

Recovered damages may be placed in the Small Spills Restoration Trust Account. OSPR Legal will arrange this with the other attorneys involved in the case. The funds will be tracked according the incident they came from and the type of restoration that for which they are targeted. The Small Spills Restoration Trust Trustee Council will include one member of OSPR and one member from each of the DFG Regions.

The Trust will contain x different sub-accounts, based on the following habitat types: xxxxx. The Stage 2 Scientific Lead will specify into which sub-account the damages should be placed. Funds within each sub-account may be pooled in order to fund larger projects. Funds may be used anywhere in the state, but are intended to benefit the habitat types under which they are specified.

Note that an incident-specific contribution to a specified project may be an acceptable alternative to using the Small Spills Restoration Trust.

#### **B.** Restoration Planning

see Appendix C for criteria

## C. Implementation of Restoration

#### D. Oversight and Record-keeping

The Small Spills Restoration Trust will be managed by the National Fish and Wildlife Foundation (NFWF).

## V. REA CALCULATION TABLE ALTERNATIVE FOR SMALL CASES

In the case of some small spills, some of the above procedures may be bypassed. The RAP has created a Resource Equivalency Analysis (REA) Calculation Table, included here with use instructions in **Appendix E**. This table enables the Scientific Lead in Stage 1 (e.g., OSPR-FRT or Regional biologist) to estimate natural resource damages.

#### A. Criteria for Use of the REA Calculation Table

If the estimate, using this table, is under \$50,000 in damages, this table may be used as the basis for damages and the alternative procedures described below may be followed. If the estimate is over \$50,000, the procedures described above should be followed. Note also that the table is only suitable for certain types of habitat injuries. Injuries to wildlife may be incorporated into the habitat injury assessment (see **Appendix E**). If the injury is more complex, consult the RAP for guidance on use of the table.

#### **B.** Alternative Procedures when the Table is Used

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In this case, the role of the RAP will be limited to that of review, while the Scientific Lead in Stage 1 will also be the Lead for Stage 2. Thus, he/she will essentially handle the whole case through settlement. Furthermore, the Damage Report will be combined with the Injury Report, explaining the use of the table. Prior to sending the final Injury and Damage Report to OSPR Legal, a draft should be sent to the RAP for review. The RAP will also keep records of the case as it does for all NRDA cases. In that vein, the Scientific or Legal Lead should also notify the RAP when the case is settled.

All of the procedures described above under **Cost Recovery, Settlement Negotiations,** and **Recovered Damages** will still apply.